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S. Holland, IL 60473 (US). VAN DRUNEN, Jeffrey  
[US/US]; 15902 Parkside, South Holland, IL 60473 (US).

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(74) Agents: RUTAN & TUCKER et al.; 611 Anton Blvd.,  
14th Floor, Costa Mesa, CA 92626-1931 (US).

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(71) Applicant (*for all designated States except US*): VDF FUTURECEUTICALS [US/US]; 300 West 6th Street, Mokense, Illinois 60954-0009 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): MILJKOVIC, Dusan [YU/US]; 4655 Ramsay Avenue, San Diego, California 92122 (US). HRANISAVLJEVIC, Jovan [YU/YU]; 109 Gosboodara Vucica, YU-11000 Belgrade (YU). PIETRZKOWSKI, Zbigniew [PL/US]; 5370 Toscana Way, H-411, San Diego, California 92122 (US). HUNTER, John [US/US]; 17256 Vollbrecht Drive,

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(54) Title: PHARMACEUTICAL COMPOSITIONS AND METHODS FOR METABOLIC MODULATION

(57) Abstract: Pharmaceutical compositions include compounds with cytokinin activity to modulate glucose and/or lipid metabolism in a mammal. Especially preferred compounds include those comprising a purine scaffold, and it is further preferred that contemplated compositions are employed to prevent and/or treat various diseases, including pre-diabetes, insulin resistance, type-2 diabetes, Syndrome X, and dyslipidemia. In still further preferred aspects, compounds with cytokinin activity are used to activate AMPK and/or Akt. Consequently, various diseases associated with dysregulation of AMPK and/or Akt may be treated using the compounds of the present inventive subject matter.

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